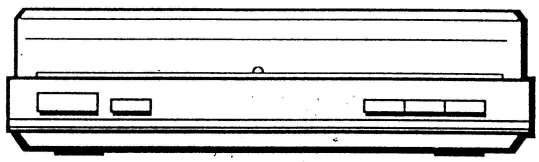
S/M Code No.90 – 007 DATE OF ISSUE 2/1990 – I

AIWA®

# PX-E80

# SERVICE MANUAL



STEREO TURNTABLE SYSTEM

● TYPE. H, U, E, K

## SPECIFICATIONS

| | |
|---|---|
| **<Turntable Section>** | |
| **Drive system** | Belt drive system |
| **Motor** | DC servo motor |
| **Speeds** | 33-1/3 and 45 rpm |
| **Wow & flutter** | 0.25% (WRMS) |
| **S/N ratio** | 45 dB (DIN-B) |
| **<Tonearm Section>** | |
| **Type** | Offset arm |
| **<Cartridge>** | |
| **Type** | VM type |
| **Frequency response** | 20–20,000 Hz |
| **<General>** | |
| **Output level** | 200 mV/(2.5 mV sw OFF) |
| **Power requirements** | **PX-E80 U**<br>AC 120 V,60 Hz<br>**PX-E80 E**<br>AC 220 V, 50/60 Hz<br>**PX-E80 K**<br>AC 240 V, 50/60 Hz<br>**PX-E80 H**<br>AC 110–120 V/220–240 V switchable, 50/60 Hz |
| **Power consumption** | 4 W |
| **Dimensions** | 360 (W) x 96.5 (H) x 350 (D) mm |
| **Weight** | 2.6 kg |
| **<Stylus>** | AN-11 |

● Design and specifications are subject to change without notice.

AIWA Co., Ltd.

Tokyo Japan

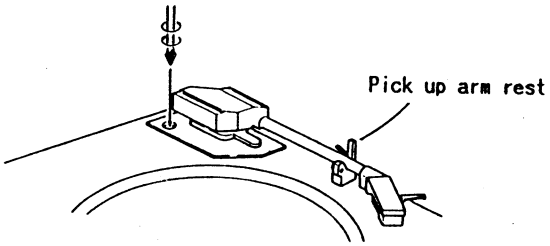
Printed in Japan

# ADJUSTMENT

1. Auto Lead In and Auto Return Adjustment.
   Test Record (YFSC-16)

| Adjustment | Disk Size | Count |
|---|---|---|
| Auto Lead In | 30cm | 5 ~ 25 |
| | 17cm | 10 ~ 32 |
| Auto Return | --- | 11 ~ 17 |

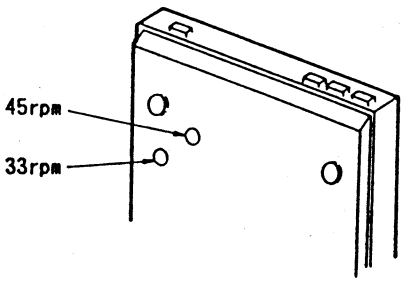
Auto lead in
adj. point




2. Phono Motor Speed Adjustment.
   Test Record (YFSC-16)
   (3kHz)

| | |
|---|---|
| 33rpm | 3000Hz |
| 45rpm | 4050Hz |

Adj. points




Bottom View

# ELECTRICAL MAIN PARTS LIST

| REF.NO. | PART NO. | DESCRIPTION |
|---|---|---|
| | === IC === | |
| | 87-027-683-010 | IC,TA7325P |
| | S4-151-012-28H | IC,UPC1228HA |
| | === DIODE === | |
| | 82-596-799-010 | DIODE,1N4002 |
| | === PRE AMP CIRCUIT BOARD SECTION === | |
| | === POWER CIRCUIT BOARD SECTION === | |
| | === SWITCH CIRCUIT BOARD SECTION === | |
| SW5 | S4-411-220-601 | SLIDE SW(EQUALIZER AMP) |
| | === TERMINAL CIRCUIT BOARD SECTION === | |
| | | (EXCEPT FOR U) |
| | === MISCELLANEOUS === | |
| | *S5-620-708-509 | PHONO CORD |
| | *S5-230-425-000 | CARTRIDGE ASSY(AT-3600LA) |
| ⚠ | *S4-635-212-265 | AC CORD(H) |
| ⚠ | *S4-632-212-065 | AC CORD(E) |
| ⚠ | *S4-633-202-365 | AC CORD(K) |
| ⚠ | *S4-631-112-065 | AC CORD(U) |
| M1 | SC-022-000-303 | DC MOTOR ASSY(MMI-6T2RWO) |
| ⚠ PT1 | S4-200-354-253 | POWER TRANSFORMER(H) |
| ⚠ PT1 | S4-200-353-252 | POWER TRANSFORMER(E) |
| ⚠ PT1 | S4-200-357-251 | POWER TRANSFORMER(K) |
| ⚠ PT1 | S4-200-351-251 | POWER TRANSFORMER(U) |
| SW1 | S4-430-222-517 | PUSH SW(POWER) |
| SW2 | +++ | PUSH SW(45-33 SPEED) |
| SW3 | S4-406-010-036 | LEAF SW(MOTOR) |
| SW4 | S4-406-010-049 | LEAF SW(MOTOR) |
| ⚠ SW6 | S4-411-120-611 | SLIDE SW(VOLTAGE SELECT)(H) |

# PRACTICAL SERVICE FIGURE

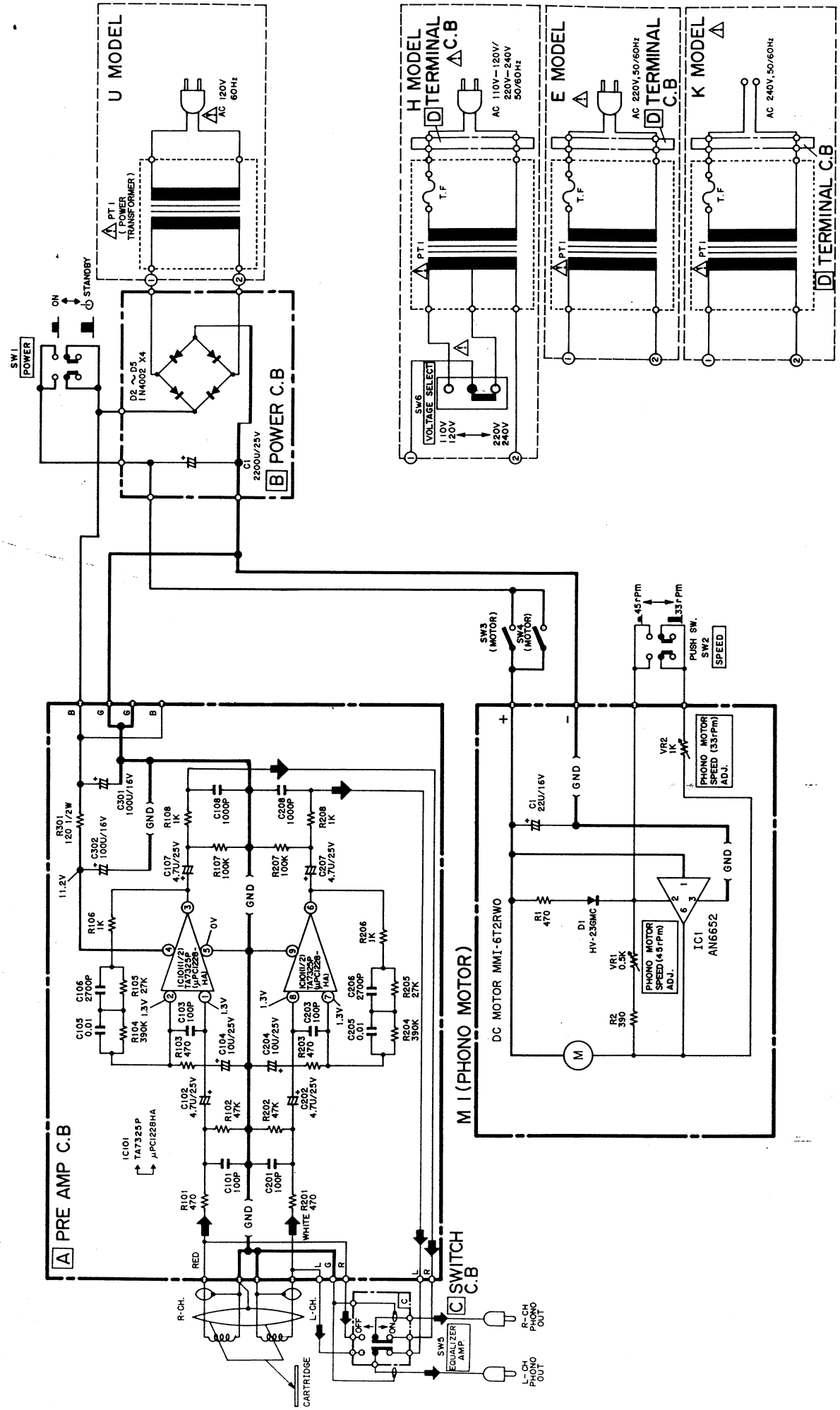
<Turntable Section>
Wow & flutter : Less than 0.25% (WRMS)

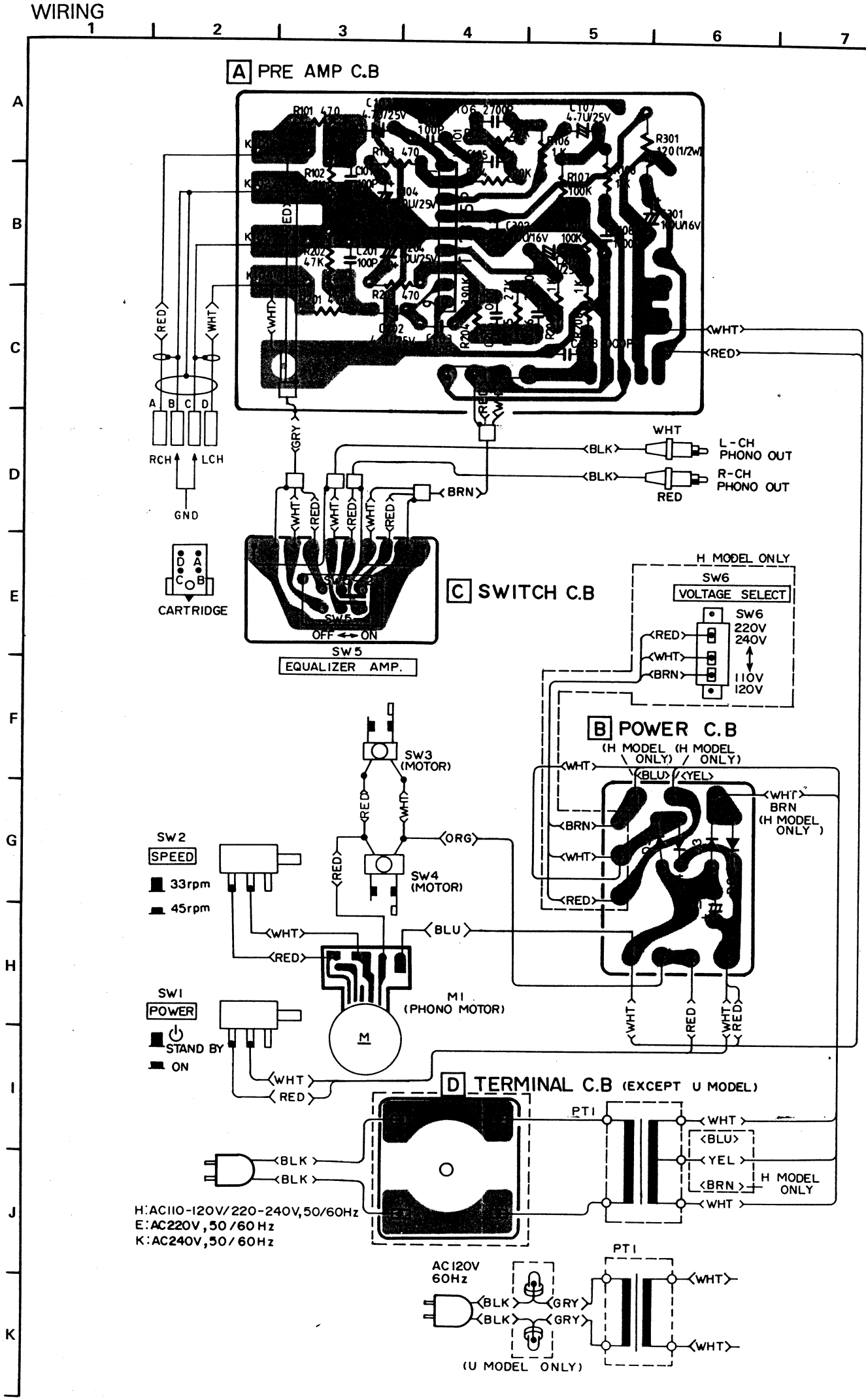
<Cartridge Section>
Stylus tip : 0.6mil.
Stylus pressure : 3.5g
Output voltage : 2.5mV (1kHz)

# ■ ACCESSORIES/PACKAGE LIST

| PART NO. CHANGED TO | REF. NO. | PART NO. | DESCRIPTION | COMMON MODEL | Q, TY |
|---|---|---|---|---|---|
| | 1 | *S9-004-104-003 | INSTRUCTION BOOKLET | * | 1 |
| | 2 | *S1-009-000-080 | EP ADAPTOR | | 1 |

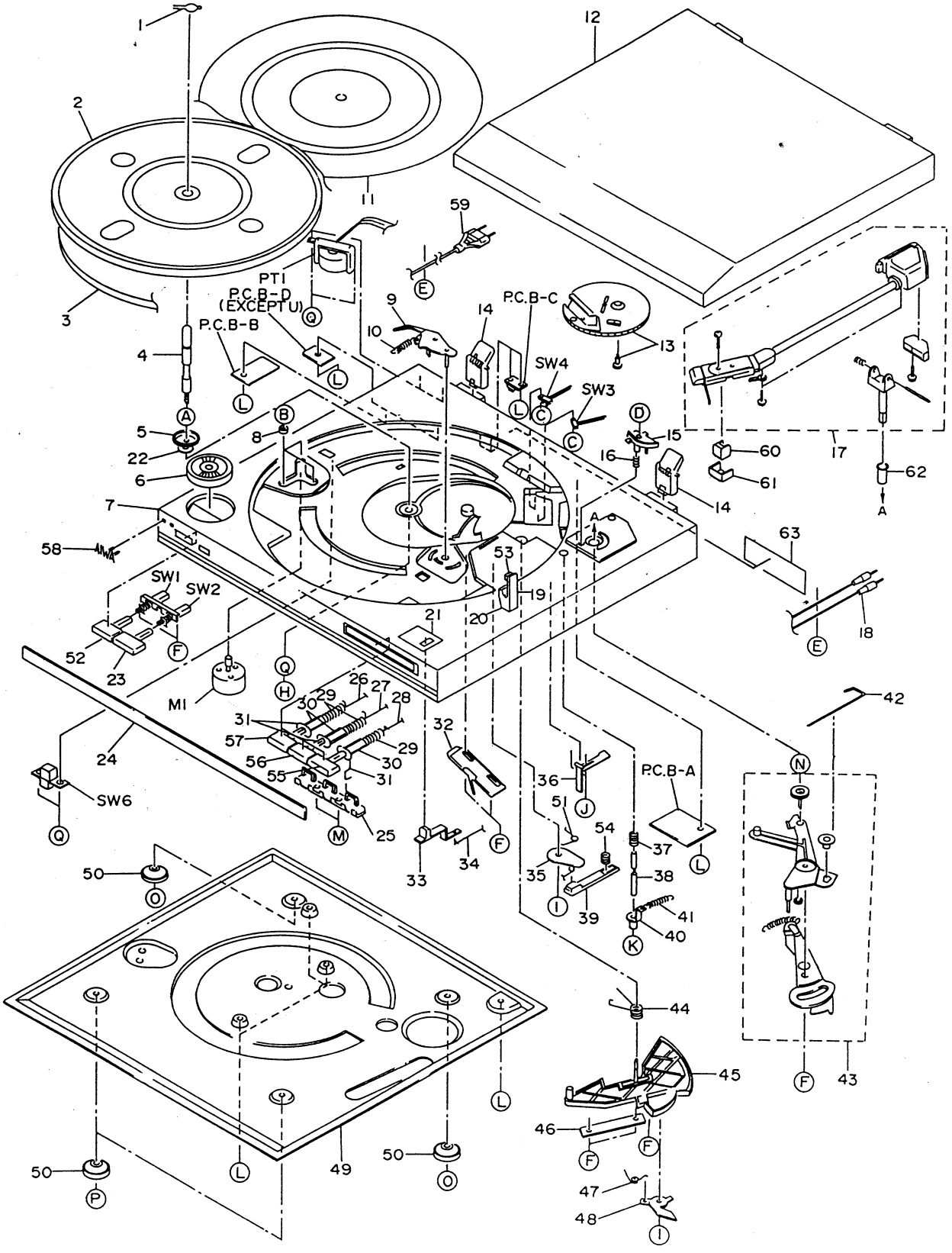
# SCHEMATIC DIAGRAM




A PRE AMP C.B
R101 470
R102
R103 470
R201 470
R202 47K
R203 470
R204 390K
R205 27K
R206 1K
R207 100K
R208 1K
R209 100K
R301 120 (1/2W)
C101 4.7U/25V
C102 100P
C103 4.7U/25V
C104 100P
C105 2700P
C106 2700P
C107 4.7U/25V
C108 100P
C201 100P
C202 4.7U/25V
C203 4.7U/16V
C204 100P
C205 4.7U/25V
C206 100P
C207 100P
C208 100P
C301 100U/16V
RED
WHT
GRY
BRN
BLK
A B C D
RCH
LCH
GND
CARTRIDGE
L-CH PHONO OUT
R-CH PHONO OUT
WHT
RED
C SWITCH C.B
SW5
OFF ↔ ON
SW5
EQUALIZER AMP.
H MODEL ONLY
SW6
VOLTAGE SELECT
SW6
220V
240V
110V
120V
B POWER C.B
(H MODEL ONLY)
(H MODEL ONLY)
BLU
YEL
BRN
(H MODEL ONLY)
SW3
(MOTOR)
SW4
(MOTOR)
ORG
SW2
SPEED
33rpm
45rpm
M1
(PHONO MOTOR)
M
SW1
POWER
STAND BY
ON
D TERMINAL C.B (EXCEPT U MODEL)
PT1
H MODEL ONLY
H:AC110-120V/220-240V,50/60Hz
E:AC220V,50/60Hz
K:AC240V,50/60Hz
AC120V
60Hz
(U MODEL ONLY)

# EXPLODED VIEW

| REF.NO. | PART NO. | DESCRIPTION | REF.NO. | PART NO. | DESCRIPTION | REF.NO. | PART NO. | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| A | S2-056-000-278 | PW 7.6x12x0.25 | G | S2-004-100-487 | SPRING WASHER | M | S8-791-301-200 | SCREW 7-BRAZ 3012 ZN3A |
| B | S2-004-100-785 | MOTOR SCREW | H | S2-032-100-050 | NUT 5OZN3A | N | S2-004-100-783 | PW 9.7x13.5x0.5 |
| C | S8-712-200-800 | SCREW 7-PAN 2008 ZN3K | I | S8-761-300-810 | SCREW 7-CUP 3008 WF10 ZN3A | O | S8-761-300-812 | SCREW 7-CUP 3008 WF10 ZN3A |
| D | S8-132-261-200 | SCREW 1-FLAT 2612 ZN3K | J | S8-761-300-610 | SCREW 7-CUP 3006 WF10 ZN3A | P | S8-761-301-412 | SCREW 7-CUP 3014 WF12 ZN3A |
| E | S0-004-100-492 | SCREW ASSY | K | S3-130-000-030 | E RING φ3 | Q | S8-132-200-700 | SCREW 1-FLAT 2007 ZN3K |
| F | S8-761-301-012 | SCREW 7-CUP 3010 | L | S8-791-301-000 | SCREW 7-BRAZ 3010 ZN3A | | | |



# MECHANICAL PARTS LIST

| PART NO. CHANGED TO | REF. NO. | PART NO. | DESCRIPTION | COMMON MODEL | Q'TY |
|---|---|---|---|---|---|
| | 1 | ★S1-006-005-025 | SPINDLE CLIP | | 1 |
| | 2 | ★S0-001-102-080 | TURNTABLE ASSY | | 1 |
| | 3 | ★S1-019-005-005 | TURNTABLE BELT | | 1 |
| | 4 | ★S1-004-102-154 | SPINDLE | | 1 |
| | 5 | ★S2-020-075-410 | SPINDLE WASHER | | 1 |
| | 6 | ★S1-009-000-080 | TURNTABLE ADAPTOR | | 1 |
| | 7 | ★S1-002-103-833 | MAIN CABINET | | 1 |
| | 8 | ★S2-065-100-278 | GROMMET(A) | | 3 |
| | 9 | ★S2-003-100-837 | REJECT LEVER | | 1 |
| | 10 | ★S2-016-005-005 | REJECT LEVER SPRING | | 1 |
| | 11 | ★S0-002-103-077 | TURNTABLE MAT ASSY | | 1 |
| | 12 | ★S0-001-102-694 | DUST COVER ASSY | | 1 |
| | 13 | ★S0-003-101-865 | CAM GEAR ASSY | | 1 |
| | 14 | ★S0-004-102-821 | HINGE ASSY | | 2 |
| | 15 | ★S1-003-101-533 | LIFT PLATFORM | | 1 |
| | 16 | ★S2-012-000-080 | ARM LIFT SPRING(A) | | 1 |
| | 17 | S0-003-103-143 | PICK UP ARM ASSY | | 1 |
| | 18 | ★S5-620-708-509 | PHONO CORD 850MM | | 1 |
| | 19 | ★S1-013-005-005 | P.U.TUBE HOOK | | 1 |
| | 20 | ★S1-003-102-173 | P.U.REST | | 1 |
| | 21 | ★S1-004-102-521 | SIZE SELECTOR OVERLAY | | 1 |
| | 22 | ★S3-021-210-022 | FLAT WASHER | | 1 |
| | 23 | ★S1-003-102-816 | SPEED KNOB | | 1 |
| | 24 | ★S1-003-102-889 | FRONT OVERLAY | | 1 |
| | 25 | ★S2-003-101-508 | CONDUCT HOLDER | | 1 |
| | 26 | ★S2-004-101-859 | REJECT ROD | | 1 |
| | 27 | ★S2-004-101-857 | CONTROL ROD | | 1 |
| | 28 | ★S2-004-101-861 | CUE ROD | | 1 |
| | 29 | ★S2-018-005-005 | CONDUCT LEVER SPRING | | 3 |
| | 30 | ★S2-005-005-005 | CONDUCT LEVER | | 3 |
| | 31 | ★S2-032-005-005 | CONDUCT WIRE | | 3 |
| | 32 | ★S2-041-005-005 | CONTROL LEVER | | 1 |
| | 33 | ★S1-009-005-005 | SIZE SELECTOR KNOB | | 1 |
| | 34 | ★S2-004-101-858 | SIZE SELECTOR ROD | | 1 |
| | 35 | ★S2-012-005-005 | SIZE SELECTOR HOLDER | | 1 |
| | 36 | ★S2-011-005-005 | CUE LEVER | | 1 |
| | 37 | ★S2-021-005-005 | ARM LIFT SPRING | | 1 |
| | 38 | ★S2-004-101-531 | ARM LIFT SHAFT | | 1 |
| | 39 | ★S2-004-100-813 | SIZE SELECTOR | | 1 |
| | 40 | ★S2-004-100-500 | ARM LIFT FORK | | 1 |
| | 41 | ★S2-042-005-005 | ARM LIFT FORK SPRING | | 1 |
| | 42 | ★S2-004-101-860 | TRIP ROD | | 1 |
| | 43 | ★S0-003-103-530 | RETURN LINK ASSY | | 1 |
| | 44 | ★S2-004-101-528 | CONTROL ARM SPRING | | 1 |
| | 45 | ★S2-002-102-297 | CONTROL ARM | | 1 |
| | 46 | ★S2-004-101-288 | HOLDER PLATE | | 1 |
| | 47 | ★S2-004-100-786 | LEVER SPRING | | 1 |
| | 48 | ★S2-004-102-048 | LEVER | | 1 |
| | 49 | ★S1-001-101-465 | BOTTOM CABINET | | 1 |
| | 50 | ★S2-003-105-015 | FOOT | | 1 |
| | 51 | ★S1-004-000-520 | SPEED SHIFT CAM SPRING | | 1 |
| | 52 | ★S1-003-103-309 | POWER KNOB | | 1 |
| | 53 | ★S2-055-001-306 | CUSHION | | 1 |
| | 54 | ★S2-004-100-853 | SIZE SELECTOR SPRING | | 1 |
| | 55 | ★S1-003-102-813 | CUE KNOB | | 1 |
| | 56 | ★S1-003-102-814 | START KNOB | | 1 |
| | 57 | ★S1-003-102-815 | CUT KNOB | | 1 |
| | 58 | ★S1-004-103-739 | AIWA MARK | | 1 |
| | 59 | ★S4-635-212-265 | AC CORD(H) | | 1 |
| | 59 | ★S4-631-112-065 | AC CORD(U) | | 1 |
| | 59 | ★S4-632-212-065 | AC CORD(E) | | 1 |
| | 59 | ★S4-633-202-365 | AC CORD(K) | | 1 |
| | 60 | S5-240-425-000 | STYLUS | | 1 |
| | 61 | ★S1-046-000-289 | CARTRIDGE COVER | | 1 |
| | 62 | ★S2-004-101-530 | P.U.HINGE COLLAR | | 1 |
| | 63 | ★S9-004-103-837 | MODEL LABEL(H) | | 1 |
| | 63 | ★S9-004-103-864 | MODEL LABEL(HJ) | | 1 |
| | 63 | ★S9-004-103-966 | MODEL LABEL(U) | | 1 |
| | 63 | ★S9-004-103-949 | MODEL LABEL(E) | | 1 |
| | 63 | ★S9-004-103-892 | MODEL LABEL(K) | | 1 |